Contents

VOLUME 10, ISSUE Nos. 1–12, SUPPLEMENT A AND ANNUAL REVIEW ISSUE

Yeast

ISSUE No. 1 JANUARY 1994

Inhibition of Protein Synthesis Disrupts the Golgi Apparatus in the Fission Yeast, *Schizosaccharomyces pombe*
K. Ayscough and G. Warren 1

Analysis of the *rad3-101* and *rad3-102* Mutations of *Saccharomyces Cerevisiae*: Implications for Structure/ Function of Rad3 Protein
B. A. Montelone and R. E. Malone 13

Extracellular Levansucrase of *Bacillus Subtilis* Produced in Yeast Remains in the Cell in its Precursor Form
P. A. Scotti, R. Chambert and M.-F. Petit-Glatron 29

A Physical Comparison of Chromosome III in Six Strains of *Saccharomyces cerevisiae*
B. L. Wicksteed, I. Collins, A. Dershowitz, L. I. Stateva, R. P. Green, S. G. Oliver, A. J. P. Brown and C. S. Newlon 39

Transport of Hexoses in Yeast. Re-examination of the Sugar Phosphorylation Hypothesis with a New Experimental Approach
J. Nevado, M. A. Navarro and C. F. Heredia 59

Cloning, Nucleotide Sequence, and Functions of *XPR6*, which Codes for a Dibasic Processing Endoprotease From the Yeast *Yarrowia lipolytica*
C. S. Enderlin and D. M. Ogrydziak 67

Molecular Characterization of the *SPT23* Gene: A Dosage-dependent Suppressor of Ty-induced Promoter Mutations From *Saccharomyces cerevisiae*
T. J. Burkett and D. J. Garfinkel 81

Transformation-associated Recombination Between Diverged and Homologous DNA Repeats is Induced by Strand Breaks
V. Larionov, N. Kouprina, N. Eidarov, E. Perkins, G. Porter and M. A. Resnick 93

Multipurpose Vectors Designed for the Fast Generation of N- or C-terminal Epitope-tagged Proteins
C. Cullin and L. Minvielle-Sebastia 105

Characterization of the *KIN2* Gene Product in *Saccharomyces cerevisiae* and Comparison Between the Kinase Activities of p145^{KIN1} and P145^{KIN2}
M. Donovan, P. Romano, M. Tibbetts and C. I. Hammond 113

YEAST SEQUENCING REPORTS

Analysis of a 11·7 kb DNA Fragment of Chromosome XI Reveals a New tRNA Gene and Four New Open Reading Frames Including a Leucine Zipper Protein and a Homologue to the Yeast Mitochondrial Regulator ABF2
B. Purnelle, J. Skala, L. van Dyck and A. Goffeau 125

Erratum to:
Sequence of a 4·8 kb Fragment of *Saccharomyces cerevisiae* Chromosome II Including Three Essential Open Reading Frames
A. Baur, I. Schaaff-Gerstenschläger, E. Boles, T. Miosga, M. Rose and F. K. Zimmermann 131

CURRENT AWARENESS ON YEAST 133

ISSUE No. 2 FEBRUARY 1994

Selectable Marker Replacement in *Saccharomyces cerevisiae*
M. Vidal and R. F. Gaber 141

Ribosome Synthesis During the Growth Cycle of *Saccharomyces cerevisiae*
Q. Ju and J. R. Warner 151

A Homologous Cell-Free System for Studying Protein Translocation Across the Endoplasmic Reticulum Membrane in Fission Yeast
P. Brennwald and J. A. Wise 159

Structural Modification of Spindle Pole Bodies During Meiosis II is Essential for the Normal Formation of Ascospores in *Schizosaccharomyces pombe*: Ultrastructural Analysis of *spo* Mutants
A. Hirata and C. Shimoda 173

A General Model of Yeast Energy Metabolism in Aerobic Chemostat Culture
J. I. Castrillo and U. O. Ugalde 185

Analysis of *PFK3*—A Gene Involved in Particulate Phosphofructokinase Synthesis Reveals Additional Functions of *TPS2* in *Saccharomyces cerevisiae*
I. P. Sur, Z. Lobo and P. K. Maitra 199

Molecular Cloning and Analysis of the Yeast Flocculation Gene *FLO1*
J. Watari, Y. Takata, M. Ogawa, H. Sahara, S. Koshino, M.-L. Onnela, U. Airaksinen, R. Jaatinen, M. Penttilä and S. Keränen 211

YEAST SEQUENCING REPORTS

The Sequence and Potential Regulatory Elements of the *HEM2* Promoter of *Saccharomyces cerevisiae*
I. R. Schlaepfer, J. R. Mattoon and G. Bajszár 227

The Complete Sequence of a 18,002 bp Segment of *Saccharomyces cerevisiae* Chromosome XI Contains the *HBS1*, *MRP-L20* and *PRP16* Genes, and Six New Open Reading Frames
J. García-Cantalejo, V. Baladrón, P. F. Esteban, M. Angeles Santos, G. Bou, M.A. Remacha, J. L. Revuelta, J. P. G. Ballesta, A. Jiménez and F. del Rey 231

Sequence Analysis of a 10 Kb Fragment of Yeast Chromosome XI Identifies the *SMY1* Locus and Reveals Sequences Related to a Pre-mRNA Splicing Factor and Vacuolar ATPase Subunit C Plus a Number of Unidentified Open Reading Frames
C. M. James, M. E. Gent, K. J. Indge and S. G. Oliver 247

Sequence Analysis of a 3.5 Kb *Eco*RI Fragment from the Left Arm of *Saccharomyces cerevisiae* Chromosome XI Reveals the Location of the *MBR1* Gene and a Sequence Related to a GTPase-activating Protein
C. M. James, M. E. Gent and S. G. Oliver 257

***SED6* is Identical to *ERG6*, and Encodes a Putative Methyltransferase Required for Ergosterol Synthesis**
K. G. Hardwick and H. R. B. Pelham 265

Corrected Sequence for the Right Telomere of *Saccharomyces cerevisiae* Chromosome III
E. J. Louis 271

CURRENT AWARENESS ON YEAST 275

ISSUE No. 3 MARCH 1994

Physiological Characterization of the Yeast Metallothionein (*CUP1*) Promoter, and Consequences of Overexpressing its Transcriptional Activator, *ACE1*
T. Hottiger, P. Fürst, G. Pohlig and J. Heim 283

Promoter Analysis of the *PDA1* Gene Encoding the E1α Subunit of the Pyruvate Dehydrogenase Complex from *Saccharomyces cerevisiae*
T. J. Wenzel, A.-M. Zuurmond, A. Bergmans, J. A. van den Berg and H.Y. Steensma 297

Sequence Comparison of the *ARG4* Chromosomal Regions from the Two Related Yeasts, *Saccharomyces cerevisiae* and *Saccharomyces douglasii*
A. Adjiri, R. Chanet, C. Mezard and F. Frabre 309

Purification of Yeast Histones Competent for Nucleosome Assembly *In Vitro*
M. Fukuma, Y. Hiraoka, H. Sakurai and T. Fukasawa 319

Purification and Properties of *Saccharomyces cerevisiae* Cystathionine β-Synthase
B.-I. Ono, K. Kijima, T. Inoue, S.-I. Miyoshi, A. Matsuda and S. Shinoda 333

A New Famliy of Yeast Genes Implicated in Ergosterol Synthesis is Related to the Human Oxysterol Binding Protein
B. Jiang, J. L. Brown, J. Sheraton, N. Fortin and H. Bussey 341

Selective Retention of Secretory Proteins in the Yeast Endoplasmic Reticulum by Treatment of Cells with a Reducing Agent
E. Jämsä, M. Simonen and M. Makarow 355

YEAST SEQUENCING REPORTS

Cloning and Sequencing of the *NES24* Gene of *Saccharomyces cerevisiae*
M. Yoshida, Y.-I. Shima, I. Uno and A. Toh-e 371

Mapping and Sequencing of Two Yeast Genes Belonging to the ATP-Binding Cassette Superfamily
M. Dean, R. Allikmets, B. Gerrard, C. Stewart, A. Kistler, B. Shafer, S. Michaelis and J. Strathern 377

A Gene from *Saccharomyces cerevisiae* which Codes for a Protein with Significant Homology to the Bacterial 3-Phosphoserine Aminotransferase
P. Belhumeur, N. Fortin and M. W. Clark 385

Genes of the Linear Mitochondrial DNA of *Williopsis mrakii*: Coding Sequences for a Maturase-like Protein, a Ribosomal Protein VAR1 Homologue, Cytochrome Oxidase Subunit 2 and Methionyl tRNA
R. Drissi, F. Sor, J. Nosek and H. Fukuhara 391

Identification of a Gene Encoding a New Ypt/Rab-like Monomeric G-protein in *Saccharomyces cerevisiae*
M. H Lai, M. Bard and D. R. Kirsch 399

Isolation and Sequence Analysis of a Gene from the Linear DNA Plasmid p*Pac*1-2 of *Pichia acaciae* that Shows Similarity to a Killer Toxin Gene of *Kluyveromyces lactis*
P. L. Bolen, E. M. Eastman, P. L. Cihak and G. T. Hayman 403

Erratum to:
Sequence and Function Analysis of a 2.73 kb Fragment of *Saccharomyces cerevisiae* Chromosome II
T. Miosga and F. K. Zimmermann 415

CURRENT AWARENESS ON YEAST 417

ISSUE No. 4 APRIL 1994

Positioning of Cell Growth and Division After Osmotic Stress Requires a MAP Kinase Pathway
J. L. Brewster and M. C. Gustin 425

Vectors for Cu^{2+}-inducible Production of Glutathione *S*-Transferase-Fusion Proteins for Single-step Purification from Yeast
A. C. Ward, L. A. Castelli, I. G. Macreadie and A. A. Azad 441

Isolation of a *CDC25* Family Gene, *MS12/LTE1*, as a Multicopy Suppressor of *ira1*
M. Shirayama, Y. Matsui, K. Tanaka anbd A. Toh-e 451

Genetic Evidence for a Functional Interaction Between *Saccharomyces cerevisiae CDC24* and *CDC42*
M. Ziman and D.I. Johnson 463

NADH: Ubiquinone Oxidoreductase in Obligate Aerobic Yeasts
R. Büschges, G. Bahrenberg, M. Zimmermann and K. Wolf 475

Regulation of *TH14(MOL1)*, a Thiamine-Biosynthetic Gene of *Saccharomyces cerevisiae*
U. M. Praekelt, K. L. Byrne and P. A. Meacock 481

A Search for an Essential Function of the Replication Origin *ARS1* in the Life Cycle of *Saccharomyces cerevisiae*
F. Kirpekar, J. Friis and K. Gulløv 491

Use of β-lactamase as a Secreted Reporter of Promoter Function in Yeast
C. P. Cartwright, Y. Li, Y.-S. Zhu, Y.-S. Kang and D. J. Tipper 497

YEAST SEQUENCING REPORTS

Isolation and Characterization of the *LEU2* Gene of *Hansenula Polymorpha*
M. O. Agaphonov, A. I. Poznyakovski, A. I. Bogdanova and M. D. Ter-Avanesyan 509

Sequence, Mapping and Disruption of *CCC1*, A Gene that Cross-Complements the Ca^{2+}-sensitive Phenotype of *csg1* Mutants
D. Fu, T. Beeler and T. Dunn 515

Organization of the Centromeric Region of Chromosome XIV in *Saccharomyces cerevisiae*
D. Lalo, S. Stettler, S. Mariotte, E. Gendreau and P. Thuriaux 523

Sequencing of Chromosome I of *Saccharomyces cerevisiae:* Analysis of the 42 Kpb *SP07-CENI-CDC15* Region
M. W. Clark, T. Keng, R. K. Storms, W. Zhong, N. Fortin, B. Zeng, S. Delaney, B. F. Ouellette, A. B. Barton, D. B. Kaback and H. Bussey 535

Yeast Mapping Reports
The Use of Random-breakage Mapping to Locate the Genes *APN1* and *YUH1* in the *Saccharomyces* Genome, and to Determine Gene Order near the Left End of Chromosome XI
J. C. Game, M. Bell, D. Ramotar and H. Miller 543

Obituary
Anthony Harry Rose 1930-1993
C. M. Brown 555

Erratum to:
The *ERG3* Gene in *Saccharomyces cerevisiae* is Required for the Utilization of Respiratory Substrates and in Heme Deficient Cells
S. J. Smith and L. W. Parks 557

CURRENT AWARENESS ON YEAST 559

SUPPLEMENT A APRIL 1994

YEAST SEQUENCING REPORTS

The Sequence of 29.7 kb from the Right Arm of Chromosome II Reveals 13 Complete Open Reading Frames of which Ten Correspond to New Genes
A.-M. Bécam, C. Cullin, E. Grzybowska, F. Lacroute, F. Nasr, O. Ozier-Kalogeropoulos, A. Palucha, P. P. Slonimski, M. Zagulski and C. J. Herbert S1

The Sequence of an 8·8 kb Segment on the Left Arm of Chromosome II from *Saccharomyces cerevisiae* Reveals Four New Open Reading Frames Including Homologs of Animal DNA Polymerase α-Primases and Bacterial GTP Cyclohydrolase II
J. Skala, L. van Dyck, B. Purnelle and A. Goffeau S13

Sequencing and Analysis of a 20·5 kb DNA Segment Located on the Left Arm of Yeast Chromosome XI
M. Vandenbol, P.-A. Bolle, C. Dion, D. Portetelle and F. Hilger S25

DNA Sequencing of a 36·2 kb Fragment Located Between the *FAS1* and *LAP4* Loci of Chromosome XI of *Saccharomyces cerevisiae*
M. Vandenbol, P.-A. Bolle, C. Dion, D. Portetelle and F. Hilger S35

Sequence around the Centromere of *Saccharomyces cerevisiae* Chromosome II: Similarity of *CEN2* to *CEN4*
K. H. Wolfe and A. J. E. Lohan S41

The Sequence of a 32 420 bp Segment Located on the Right Arm of Chromosome II from *Saccharomyces cerevisiae*
K. Holmstrøm, T. Brandt and T. Kallesøe S47

Sequence of a 28·6 kb Region of Yeast Crhomosome XI Includes the *FBA1* and *TOA2* Genes, an Open Reading Frame (ORF) Similar to a Translationally Controlled Tumour Protein, one ORF Containing Motifs also Found in Plant Storage Proteins and 13 ORFs With Weak or no Homology to Known Proteins
S. A. Rasmussen S63

Sequence of a 20·7 kb Region of Yeast Chromosome XI Includes the *NUP100* Gene, an Open Reading Frame (ORF) Possibly Representing a Nucleoside Diphosphate Kinase Gene, tRNAs for His, Val and Trp in Addition to Seven ORFs With Weak or no Significant Similarity to Known Proteins
S. W. Rasmussen S69

The Complete Sequence of a 33 kb Fragment on the Right Arm of Chromosome II from *Saccharomyces cerevisiae* Reveals 16 Open Reading Frames, Including Ten New Open Reading Frames, Five Previously Identified Genes and a Homologue of the *SCO1* Gene
P. H. M Smits, M. de Haan, C. Maat and L. A. Grivell S75

Sequencing of a 13·2 kb Segment Next to the Left Telomere of Yeast Chromosome XI Revealed Five Open Reading Frames and Recent Recombination Events with the Right Arms of Chromosomes III and V
D. Alexandraki and M. Tzermia S81

ISSUE No. 5 MAY 1994

The *Saccharomyces cerevisiae* Gene *PPH3* Encodes a Protein Phosphatase with Properties Different from *PPX*, *PP1*, and *PP2A*
R. Hoffmann, S. Jung, M. Ehrmann and H. W. Hofer 567

Saccharomyces cerevisiae MATa Mutant Cells Defective in Pointed Projection Formation in Response to α-Factor at High Concentrations
T. Yorihuzi and Y. Ohsumi 579

Chemical Synthesis of the M-factor Mating Pheromone from _Schizosaccharomyces pombe_
S.-H. Wang, C.-B. Xue, O. Nielsen, J. Davey and F. Naider 595

The Frequency of Oligopurine, Ologopyrimidine and Other Two-Base Tracts in Yeast Chromosome III
G. Yagil 603

Molecular Analysis of the Malic Enzyme Gene (_mae 2_) of _Schizosaccharomyces pombe_
M. Viljoen, R. E. Subden, A. Krizus and H. J. J. van Vuuren 613

Transfer RNA Profiling: A New Method for the Identification of Pathogenic _Candida_ Species
M. A. S. Santos, C. El-Adlouni, A. D. Cox, J. M. Luz, G. Keith and M. F. Tuite 625

Transcription Regulation of Ribosomal Protein Genes at Different Growth Rates in Continuous Cultures of _Kluyveromyces_ Yeasts
R. Hoekstra, P. Groeneveld, H. W. van Verseveld, A. H. Stouthamer and R. J. Planta 637

YEAST SEQUENCING REPORTS

APL1, A Yeast Gene Encoding a Putative Permease for Basic Amino Acids
H. Sychrova and M.-R. Chevallier 653

A _Saccharomyces cerevisiae_ Gene Encoding a Potential Adenine Phosphoribosyltransferase
A. Yuryev and J. L. Corden 659

The Complete Sequencing of a 24·6 kb Segment of Yeast Chromosome XI Identified the Known Loci _URA1_, _SAC1_ and _TRP3_, and Revealed 6 New Open Reading Frames Including Homologues to the Threonine Dehydratases, Membrane Transporters, Hydantoinases and the Phospholipase A_2-Activating Protein
M. Tzermia, O. Horaitis and D. Alexandraki 663

The Yeast YKL741 Gene Situated on the Left Arm of Chromosome XI Codes for a Homologue of the Human ALD Protein
P. Bossier, L. Fernandes, C. Vilela and C. Rodrigues-Pousada 681

Yeast Mapping Reports
The _MAG1*_ 3-Methyladenine DNA Glycosylase Gene is Closely Linked to the _SPT15_ TATA-Binding TFIID Gene on Chromosomne V-R in _Saccharomyces cerevisiae_
W. Xiao, V. Penugonde and G. H. Rank 687

Genetic Mapping of _STE20_ to the Left Arm of Chromosome VIII
J. Horecka and G. F. Sprague, Jr. 693

RPL44 and _RPL44'_, Encoding Acidic Ribosomal Phophoproteins YP2α(L44) and YP1β(L44'), are Adjacent to _rig_ and _STF1_ on _Saccharomyces cerevisiae_ Chromosome XV and IV Respectively
M. A. Rodriguez-Gabriel, R. Zambrano and J. P. G. Ballesta 697

CURRENT AWARENESS ON YEAST 701

ISSUE No. 6 JUNE 1994

Calendar ii

Specific Identification of _Candida albicans_ by Hybridization with Oligonucleotides Derived from Ribosomal DNA Internal Spacers
A.R. Botelho and R. J. Planta 709

A New Nuclear Suppressor System for a Mitochondrial RNA Polymerase Mutant Identifies an Unusual Zinc-Finger Protein and a Polyglutamine Domain Protein in _Saccharomyces cerevisiae_
S. Bröhl, T. Lisowsky, G. Riemen and G. Michaelis 719

Characterization of _MEL_ Genes in the Genus _Zygosaccharomyces_
H. Turakainen, M. Hankaanpää, M. Korhola and S. Aho 733

Yeast Exo-β-glucanases can be Used as Efficient and Readily Detectable Reporter Genes in _Saccharomyces cerevisiae_
V. J. Cid, A. M. Alvarez, A. I. Santos, C. Nombela and M. Sanchez 747

Mating Pheromone-induced Expression of the _mat1-Pm_ Gene of _Schizosaccharomyces pombe_: Identification of Signalling Components and Characterization of Upstream Controlling Elements
T. Aono, H. Yanai, F. Miki, J. Davey and C. Shimoda 757

Defining the Sequence Specificity of the *Saccharomyces cerevisiae* DNA Binding Protein REB1p by Selecting Binding Sites from Random-Sequence Oligonucleotides
P. C. Y. Liaw and C. J. Brandl 771

YEAST SEQUENCING REPORTS

Comparison of *INO1* Gene Sequences and Products in *Candida albicans* and *Saccharomyces cerevisiae*
L. S. Klig, P. A. Zobel, C. G. Devry and C. Losberger 789

Isolation and DNA Sequence of the *STE13* Gene Encoding Dipeptidyl Aminopeptidase
S. S. Anna-Arriola and I. Herskowitz 801

Revised Nucleotide Sequence of the COR Region of Yeast *Saccharomyces cerevisiae* Chromosome X
M.-E. Huang, V. Manus, J.-C. Chuat and F. Galibert 811

Nucleotide Sequence Analysis of an 11·7 kb Fragment of Yeast Chromosome II Including *BEM1*, a New Gene of the WD-40 Repeat Family and a New Member of the *KRE2/MNT1* Family
L. Mallet, F. Bussereau and M. Jacquet 819

Yeast Mapping Reports
Mapping of the Divergently Transcribed Sporulation-Specific Genes *SPS18* and *SPS19* to the Left Arm of Chromosome XIV of *Saccharomyces cerevisiae*
J. G. S. Coe, K. Hamberg and I. W. Dawes 833

***MTF1*, Encoding the Yeast Mitochondrial RNA Polymerase Specificity factor, is Located on Chromosome XIII**
T. L. Ulery and J. A. Jehning 839

CURRENT AWARENESS ON YEAST 843

ISSUE No. 7 JULY 1994

Review: Cell Wall Assembly in Yeast
F. M. Klis 851

Genetic Interrelationship Among Species of the Genus *Zygosaccharomyces* as Revealed by Small-Subunit rRNA Gene Sequences
S. A. James, M. D. Collins and I. N. Roberts 871

A Fission Yeast Gene Encoding a Protein that Preferentially Associates with Curved DNA
H. Yamada, H. Mori, M. Momoi, Y. Nakagawa, C. Ueguchi and T. Mizuno 883

Mating in the Heterothallic Haploid Yeast *Clavispora opuntiae*, with Special Reference to Mating Type Imbalances in Local Populations
M.-A. Lachance, P. Nair and P. Lo 895

Formation of Poliomyelitis Subviral Particles in the Yeast *Saccharomyces cerevisiae*
J. P. M. Jore, G. Veldhuisen, M. Kottenhagen, P. H. Pouwels, A. Foriers, B. Rombaut and A. Boeye 907

Cloning and Sequencing of *Schizosaccharomyces pombe carI* Gene Encoding Arginase. Expression of the Arginine Anabolic and Catabolic Genes in Response to Arginine and Related Metabolites
C. van Huffel, E. Dubois and F. Messenguy 923

The Peroxisomal Targeting Signal of 3-Oxoacyl-CoA Thiolase from *Saccharomyces cerevisiae*
R. Erdmann 935

YEAST SEQUENCING REPORTS

Nucleotide Sequence Analysis of an 8887 bp Region of the Left Arm of Yeast Chromosome XIV, Encompassing the Centromere Sequence
P. Verhasselt, R. Aert, M. Voet and G. Volckaert 945

***LTE1* of *Saccharomyces cerevisiae* is a 1435 Codon Open Reading Frame that has Sequence Similarities to Guanine Nucleotide Releasing Factors**
T. Keng, M. W. Clark, R. K. Storms, N. Fortin, W. Zhong, B. F. Francis Ouellette, A. B. Barton, D. B. Kaback and H. Bussey 953

Sequence Analsysis of a 31 kb DNA Fragment from the Right Arm of *Saccharomyces cerevisiae* Chromosome II
Q. J. M. van der Aart, C. Barthe, F. Doignon, M. Aigle, M. Crouzet and H. Y. Steensma 959

Sequence and Function Analysis of a 9·46 kb Fragment of *Saccharomyces cerevisiae* Chromosome X
T. Miosga, A. Witzel and F. K. Zimmermann 965

Obituary
In Memory of Seymour Fogel
M. S. Esposito, T. G. Cooper and P. P., Slonimski 975

Erratum to:
Ribosome Synthesis During the Growth Cycle of *Saccharomyces cerevisiae*
Q. Ju and J. R. Warner 979

CURRENT AWARENESS ON YEAST 985

ISSUE No. 8 AUGUST 1994

In the Budding Yeast *Kluyveromyces marxianus*, Adenylate Cyclase is Regulated by Ras protein(s) *in vitro*
E. Verzotti, M. Geymonat, F. Valetti, L. Lanzetti and C. Giunta 993

Functional Expression of Human Poly(ADP-Ribose) Polymerase in *Schizosaccharomyces pombe* Results in Mitotic Delay at G_1, Increased Mutation Rate, and Sensitization to Radiation
M. A. Avila, J. A. Velasco, M. E. Smulson, A. Dritschilo, R. Castro and V. Notario 1003

A New Approach for Isolating Cell Wall Mutants in *Saccharomyces cerevisiae* by Screening for Hypersensitivity to Calcofluor White
A. F. J. Ram, A. Wolters, R. ten Hoopen and F. M. Klis 1019

Phosphoribosylpyrophosphate Synthetase (*PRS*): A New Gene Family in *Saccharomyces cerevisiae*
A. T. Carter, A. Narbad, B. M. Pearson, K.-F. Beck, B. Baum, M. Logghe, R. Contreras and M. Schweizer . 1031

Codon Usage Table for *Schizosaccharomyces pombe*
S. L. Forsburg 1045

Activation of Trehalase During Growth Induction by Nitrogen Sources in the Yeast *Saccharomyces cerevisiae* Depends on the Free Catalytic Subunits of cAMP-Dependent Protein Kinase, but not on Functional Ras Proteins
P. Durnez, M. B. Pernambuco, E. Oris, J.-C. Argüelles, H. Mergelsberg and J. M. Thevelein 1049

Predominant Localization of Non-specific Lipid-Transfer Protein of the Yeast *Candida tropicalis* in the Matrix of Peroxisomes
H. Tan, M. Bun-Ya, A. Hirata and T. Kamiryo 1065

nmt2* of Fission Yeast: A Second Thiamine-Repressible Gene Co-ordinately Regulated with *nmt1
A. G. O. Manetti, M. Rosetto and K. G. Maundrell 1075

Analysis of β-Glucans and Chitin in a *Saccharomyces cerevisiae* Cell Wall Mutant Using High-performance Liquid Chromatography
Z. Hong, P. Mann, K. J. Shaw and B. DiDomenico 1083

YEAST SEQUENCING REPORTS

The Two Genes Encoding Yeast Ribosomal Protein S8 Reside on Different Chromosomes, and are Closely Linked to the hsp70 Stress Protein Genes *SSA3* and *SSA4*
M. Logghe, F. Molemans, W. Fiers and R. Contreras 1093

Cloning and Characterization of a Sulphite-Resistance Gene of *Saccharomyces cerevisiae*
E. Casalone, C. M. Colella, S. Daly, S. Fontana, I. Torricelli and M. Polsinelli 1101

The Nucleotide Sequence of *TTP1*, a Gene Encoding a Predicted Type II Membrane Protein
P. A. Romero, A. Athanassiadis, M. Lussier and A. Herscovics 1111

Cloning and DNA Sequence of a *Kluyveromyces lactis ERD1* Homologue
N. Dean 1117

CURRENT AWARENESS ON YEAST 1125

ISSUE No. 9 SEPTEMBER 1994

Glucose Metabolism and Ethanol Production in *adh* Multiple and Null Mutants of *Kluyveromyces lactis*
M. Saliola, S. Bellardi, I. Marta and C. Falcone 1133

Identification of a Set of Yeast Genes Coding for a Novel Family of Putative ATPases With High Similarity to Constituents of the 26S Protease Complex
R. Schnall, G. Mannhaupt, R. Stucka, R. Tauer, S. Ehnle, C. Schwarzlose, I. Vetter and H. Feldmann 1141

Physical Constitution of Ribosomal Genes in Common Strains of *Saccharomyces cerevisiae*
E. P. Rustchenko and F. Sherman 1157

Purification and Immunolocalization of the Peroxisomal 3-Oxoacyl-CoA Thiolase from *Saccharomyces cerevisiae*
R. Erdmann and W. Kunau 1173

Isolation and Partial Purification of Mannose-specific Agglutinin from Brewer's Yeast Involved in Flocculation
M. H. Straver, V. M. Traas, G. Smit and J. W. Kijne 1183

Molecular Characterization of a Gene that Confers 2-Deoxyglucose Resistance in Yeast
P. Sanz, F. Randez-Gil and J. A. Prieto 1195

The *in vivo* Effects of Ethidium Bromide on Mitochondrial and Ribosomal DNA in *Candida parapsilosis*
R. Maleszka 1203

YEAST SEQUENCING REPORTS

Nucleotide Sequence of the *SAC2* Gene of *Saccharomyces cerevisiae*
R. Kölling, A. Lee, E. Y. Chen and D. Botstein 1211

A Putative P-type Cu^{2+}-transporting ATPase Gene on Chromosome II of *Saccharomyces cerevisiae*
M. R. Rad, L. Kirchrath and C. P. Hollenberg 1217

The Sequence of 12·5 kb from the Right Arm of Chromosome II Predicts a New N-terminal Sequence for the IRA1 Protein and Reveals Two New Genes, One of Which is a DEAD-box Helicase
M. Zagulski, A. Bécam, Y. Grzybowska, F. Lacroute, A. Migdalski, P. P. Slonimski, B. Sokolowska and C. J. Herbert 1227

The Sequence of a 36 kb Segment on the Left Arm of Yeast Chromosome X Identifies 24 Open Reading Frames Including *NUC1*, *PRP21* (*SPP91*), *CDC6*, *CRY2*, the Gene for S24 a Homologue to the Aconitase Gene *ACO1* and Two Homologues to Chromosome III Genes
B. Purnelle, F. Coster and A. Goffeau 1235

Sequence of a Segment of Yeast Chromosome II Shows Two Novel Genes, One Almost Entirely Hydrophobic and the Other Extremely Asparagine-Serine Rich
M. E. Cusik 1251

Erratum to:
Sequence and Function Analysis of a 4·3 kb Fragment of *Saccharomyces cerevisiae* Chromosome II Including Three Open Reading Frames
I. Schaaff-Gerstenschläger, A. Baur, E. Boles and F. K. Zimmermann 1257

CURRENT AWARENESS ON YEAST 1259

ISSUE No. 10 OCTOBER 1994

A Family of Vectors that Facilitate Transposon and Insertional Mutagenesis of Cloned Genes in Yeast
J. B. Allen and S. J. Elledge 1267

A Genetic Screen to Isolate Genes Regulated by the Yeast CCAAT-box Binding Protein Hap2p
V.-D. Dang, M. Valens, M. Bolotin-Fukuhara and B. Daignan-Fornier 1273

Genetic and Molecular Analysis of Hybrids in the Genus *Saccharomyces* Involving *S. cerevisiae*, *S. uvarum* and a New Species, *S. douglasii*
D. Hawthorne and P. Philippsen 1285

Physiological Approach to Heterologous Human Serum Albumin Production by *Kluyveromyces lactis* in Chemostat Culture
K. Blondeau, B. Hélène, G. Jung, G. Moulin and P. Galzy 1297

Rapid Protein Extraction from *Saccharomyces cerevisiae*
A. Horvath and H. Riezman 1305

Detection of Polygalacturonase, Pectin-lyase and Pectin-esterase Activities in a *Saccharomyces cerevisiae* Strain
A. Gainvors, V. Frézier, H. Lemaresquier, C. Lequart, M. Aigle and A. Belarbi 1311

Expression and *in vivo* Determination of Firefly Luciferase as Gene Reporter in *Saccharomyces cerevisiae*
J M Vieites, F. Navarro-García, R. Pérez–Diaz, J. Pla and C. Nombela 1321

The *TYE7* Gene of *Saccharomyces cerevisiae* Encodes a Putative bHLH-LZ Transcription Factor Required for Tyl-mediated Gene Expression
C. Löhning and M. Ciriacy 1329

A Novel Structural Form of the 2 Micron Plasmid of the Yeast *Saccharomyces cerevisiae*
T. D. Petes and D. H. Williamson 1341

Assessment of Pheromone Production and Response in Fission Yeast by a Halo Test of Induced Sporulation
R. Egel, M. Willer, S. Kjærulff, J. Davey and O. Nielsen 1347

YEAST SEQUENCING REPORTS

Twelve Open Reading Frames Revealed in the 23.6 kb Segment Flanking the Centromere on the *Saccharomyces cerevisiae* Chromosome XIV Right Arm
P. Verhasselt, R. Aert, M. Voet and G. Volckaert 1355

Analysis of a 70 kb Region on the Right Arm of Yeast Chromosome II
G. Mannhaupt, R. Stucka, S. Ehnle, I. Vetter and H. Feldmann 1363

Sequence of a 10.27 kb Segment on the Left Arm of Chromosome XV from *Saccharomyces cerevisiae* Includes Part of the *IRA2* Gene and a Putative New Gene
E. Zumstein, H. Griffin and M. Schweizer 1383

Sequence of the *AFG3* Gene Encoding a New Member of the FtsH/Ymel/Tma Subfamily of the AAA-Protein Family
E. Guelin, M. Rep and L. A. Grivell 1389

CURRENT AWARENESS ON YEAST 1395

ISSUE No. 11 NOVEMBER 1994

Transcript Map of Two Regions from Chromosome XI of *Saccharomyces cerevisiae* for Interpretation of Systematic Sequencing Results
C. Fairhead And B. Dujon 1403

Efficient Expression and Secretion of Recombinant Alpha Amylase in *Pichia pastoris* Using Two Different Signal Sequences
E. Paifer, E. Margolles, J. Cremata, R. Montesino, L. Herrera and J. M. Delgado 1415

Characterization of Lipid Particles of the Yeast, *Saccharomyces cerevisiae*
R. Leber, E. Zinser, G. Zellnig, F. Paltauf and G. Daum 1421

Generation of Glycerophospholipid Molecular Species in the Yeast, *Saccharomyces cerevisiae* Fatty Acid Pattern of Phospholipid Classes and Selective Acyl Turnover at *sn*-1 and *sn*-2 Positions
S. Wagner and F. Paltauf 1429

The *in vivo* Activation of *Saccharomyces cerevisiae* Plasma Membrane H^+-ATPase by Ethanol Depends on the Expression of the *PMA1* Gene, but not of the *PMA2* Gene
G. A. Monteiro, P. Supply, A. Goffeau and I. Sá-Correia 1439

The Peroxisomal Membrane Proteins of *Candida boidinii*: Gene Isolation and Expression
M. Moreno, R. Lark, K. L. Campbell and J. A. Goodman 1447

Isolation and Preliminary Characterization of *Pichia pinus* Mutants Insensitive to Glucose Repression
T. Alamäe and J. Simisker 1459

Near-Stoichiometric Interaction Between the Non-specific Lipid-Transfer Protein of the Yeast *Candida tropicalis* and Peroxisomal Acyl-Coenzyme A Oxidase Prevents the Thermal Denaturation of the Enzyme *in vitro*
T. Niki, M. Bun-ya, Y. Hiraga, Y. Muro and T. Kamiryo 1467

YEAST SEQUENCING REPORTS

Sequence of *MKT1*, Needed for Propagation of M_2 Satellite dsRNA of the L-A Virus of *Saccharomyces cerevisiae*
M. Vermut, W. R. Widner, J. D. Dinman and R. B. Wickner 1477

Sequence and Function Analysis of a 9.74 kb Fragment of *Saccharomyces cerevisiae* Chromosome X including the *BCK1* Gene
T. Miosga, E. Boles, I. Schaaff-Gerstenschläger, S. Schmitt and F. K. Zimmermann 1481

The Sequence of a 22.4 kb DNA Fragment from the Left Arm of Yeast Chromosome II Reveals Homologues to Bacterial Proline Synthetase and Murine α-Adaptin, as well as a New Permease and a DNA-Binding Protein
P. de Wergifosse, B. Jacques, J.-L. Jonniaux, B. Purnelle, J. Skala and A. Goffeau 1489

***UBP5* Encodes a Putative Yeast Ubiquitin-specific Protease That is Related to the Human Tre-2 Oncogene Product**
W. Xiao, T. Fontanie and M. Tang 1497

Cloning and Sequence of *REV7*, a Gene Whose Function is Required for DNA Damage-induced Mutagenesis in *Saccharomyces cerevisiae*
L. E. Torpey, P. E. M. Gibbs, J. Nelson and C. W. Lawrence 1503

A 12.5 kb Fragment of the Yeast Chromosome II Contains Two Adjecent Genes Encoding Ribosomal Proteins and Six Putative New Genes, One of Which Encodes a Putative Transcriptional Factor
N. Démolis, L. Mallet and M. Jacquet 1511

DNA Sequence Analysis of a 10.4 kbp Region on the Right Arm of Yeast Chromosome XVI Positions *GPH1* and *SGV1* Adjacent to *KRE6*, and Identifies Two Novel tRNA Genes
T. Roemer, N. Fortin and H. Bussey 1527

Yeast Mapping Report
***ATP1* and *ATP2*, the F_1F_0-ATPase α and β Subunit Genes of *Saccharomyces cerevisiae*, are Respectively Located on Chromosomes II and X**
M. Takeda, T. Okushiba, T. Hayashida and N. Gunge 1531

CURRENT AWARENESS ON YEAST 1535

ISSUE No. 12 DECEMBER 1994

Genome Renewal: A new Phenomenon Revealed From A Genetic Study of 43 Strains of *Saccharomyces cerevisiae* Derived From Natural Fermentations of Grape Musts
R. K. Mortimer, P. Romano, G. Suzzi and M. Polsinelli 1543

Respiratory Inhibitors Affect Incorporation of Glucose into *Saccharomyces cerevisiae* Cells, but not the Activity of Glucose Transport
M. C. Walsh, H.-P. Smits and K. van Dam 1553

Consideration of the Evolution of the *Saccaromyces cerevisiae MEL* Gene Family on the Basis of the Nucleotide Sequences of the Genes and Their Flanking Regions
H. Turakainen, P. Kristo and M. Korhola 1559

Increase in Copy Number of an Integrated Vector During Continuous Culture of *Hansenula polymorpha* Expressing Functional Human Haemoglobin
S. C. Gilbert, H. van Urk, A. J. Greenfield, M. J. McAvoy, K. A. Denton, D. Coghlan, G. D. Jones and D. J. Mead 1569

The Nucleotide Sequence and Initial Characterization of Pyruvate Decarboxylase from the Yeast *Hanseniaspora uvarum*
P. Holloway and R. E. Subden 1581

The Linkage of (1-3)-β-Glucan to Chitin During Cell Wall Assembly in *Saccharomyces cerevisiae*
R. P. Hartland, C. A. Vermeulen, F. M. Klis, J. H. Sietsma and J. G. H. Wessels 1591

Development of a Transformation System for the Yeast *Yamadazyma (Pichia) ohmeri*
S. Piredda and C. Gaillardin 1601

Effect of Site-Directed Mutagenesis of Conserved Lysine Residues upon Pas1 Protein Function in Peroxisome Biogenesis
T. Krause, W.-H. Kunau and R. Erdmann 1613

Kluyveromyces marxianus* Small DNA Fragments Contain Both Autonomous Replicative and Centromeric Elements that also Function in *Kluyveromyces lactis
F. Iborra and M. M. Ball 1621

Characterization of an active GST-human Cdc2 Fusion Protein Kinase Expressed in the Fission Yeast *Schizosaccharomyces pombe*: A New Approach to the Study of Cell Cycle Control Proteins
D. Leroy, V. Baldin and B. Ducommun 1631

YEAST SEQUENCING REPORTS

A 21.7 kb DNA Segment on the Left Arm of Yeast Chromosome XIV Carries *WH13*, *GCR2*, *SPX18*, *SPX19*, an Homologue to the Heat Shock Gene *SSB1* and 8 New Open Reading Frames of Unknown Function
J. L. Jonniaux, F. Coster, B. Purnelle and A. Goffeau 1639

CAN1*, a Gene Encoding a Permease for Basic Amino Acids in *Candida albicans
H. Sychrová and J. Souciet 1647

Sequence of the *PHO2-POL3 (CDC2)* Region of Chromosome IV of *Saccharomyces cerevisiae*
M. Simon, P. Bénit, A. Vassal, C. Dubois and G. Faye 1653

Sequence Analysis of a 40.2 kb DNA Fragment Located Near the Left Telomere of Yeast Chromosome X
M. Vandenbol, P. Durand, P.-A. Bolle, C. Dion, D. Portetelle and F. Hilger 1657

Analysis of a 17.4 kb DNA Segment of Yeast Chromosome II Encompassing the Ribosomal Protein L19 as well as Proteins with Homologies to Components of the hnRNP and snRNP Complexes and to the Human Proliferation-associated p120 Antigen
L. Van Dyck, J.-L. Jonniaux, T. de Melo Barreiros, K. Kleine and A. Goffeau 1663

CURRENT AWARENESS ON YEAST 1675

ISSUE No. 13, ANNUAL REVIEW ISSUE, DECEMBER 1994

Publisher's Note 1683

Editorial 1685

Sequencing the Yeast Genome: An International Achievement
J. Levy 1689

The Non-*Saccharomyces* Yeasts
P. E. Sudbery 1707

Molecular Taxonomy of the Yeasts
C. P. Kurtzman 1727

Another Brick in the Wall? Recent Developments Concerning the Yeast Cell Envelope
M. Stratford 1741

Signal Transduction in Yeast
J. M. Thevelein 1753

Introduction to Functional Analysis Reports 1791

New Heterologous Modules for Classical or PCR-based Gene Disruptions in *Saccharomyces cerevisiae*
A. Wach, A. Brachat, R. Pöhlmann and P. Philippsen 1793

Volume Contents, Volume 10 iii

Author Index, Volume 10 xv

Key word Index, Volume 10 xviii